

THE EVENING WORLD'S RADIO PHONE SERVICE COLUMN.

By Capt. Robt. Scofield Wood

Di. F. C. M. C., Croix de Guerre with
four palmes, formerly Commander 167th
Squadron, Royal Air Force.

RADIO FOR AEROPLANES.

The radio regulations advocated by
The Evening World for aeroplane equip-
ment bears fruit and, as enforced as an-
nounced by Secretary of the Navy
Dahlgren, will make coastwise aeroplanes
as safe as a chair at the opera.

The regulations provide that all aero-
planes making long passenger flights be
equipped with radio sets of sufficient
strength to communicate with ship or
shore stations within a radius of 300
miles. It is also planned to install radio
sets complete on all mail machines, af-
forded the pilot constant communica-
tion with both ends of his route.

Not only are machines being equipped
with sets for communication, but also
for purposes of navigation, as is evi-
denced by the daily reports of the Radio
Beacon Service. Some aeronavigators
call for their positions whenever the
slightest doubt occurs.

Navigators of the old school feel very
acutely the imputation of having their
exact location given to them by an out-
side party, but not so with the naviga-
tors of the new school, among whom
the aero-pilots are numbered. They re-
alize among other things that humans
will, can and do err, and that there is
little or no room for a mistake in an
aeroplane, and that the obligation of
safety to their passengers and crew
comes before the pride of correct nav-
igation.

The question of space and weight in
aero construction has always been of
vital importance to aeronautical en-
gineers. This is primarily because
aeronautical development came under
war conditions and engineers have not
yet thoroughly away from the point
wherein everything was sacrificed to
speed and maneuverability. Even on
the smallest scouts, room was found
for a wireless transmitting set, which
invariably proved invaluable in the
course of a "day's work."

We have now passed the stage of
sacrifice in aero construction and the
"safety first" principles should be ap-
plied. Radio offers a factor of safety
that is paramount in present day
aerial activities. Not only should
provisions be made for the best instal-
lation consistent with the service to be
rendered but an operator should be
carried, to the exclusion of other things
if necessary, whose sole duty it will be
to look after the wireless communica-
tion and who, under the direction of
the navigator, will get in touch for pur-
poses of checking the craft's position,
with the Radio Beacon Service of the
United States Navy.

When an aeroplane needs help it needs

it badly, and there is no time to spare if
the assistance is to be of any earthly use
to those on board. Consider for a mo-
ment the plight of passengers on a
fragile aircraft forced to land fifty or
even ten miles from land in a sea that
is running heavy. The hull, which is its
strongest section, is of very little dura-
bility when faced by tons of water fall-
ing from a height of fifteen or twenty
feet. The whole machine breaks up in
less time than it takes to tell it and the
passengers have about as much chance
of living in this water for any length
of time as the proverbial snowball has
in the regions below. The use of radio
communication and directional wireless
are obvious in such exigencies.

There are along the coast forty-three
radio beacons and thousands of amateur
stations within the 300-mile radius of
the prescribed installation, so that any
one calling for his position and help
can be assured that assistance will be
started on its way before the last part
of the message has been received.

With the facilities and willingness of-
fered by the Government to answer and
aid all craft in time of need it should
not be necessary to enforce the new
aeronautical rulings. Owners of aircraft
should embrace without a moment's
hesitation the opportunities offered, and
install immediately the necessary equip-
ment and personnel.

WOODEN FLEET'S RADIO EQUIP- MENT.

Slowly but surely the wooden fleet of
World War fame is being disposed of.
This is not an announcement of the sale
of the fleet but just the disposition of
another part of its equipment. From
time to time various boards have ad-
vocated writing the cost of the fleet off
and sinking it, selling it or dismantling
it and disposing of it as junk. The first
two methods of disposal failed, first be-
cause Congress would not shoulder the
responsibility of answer to the people
for an order of wanton waste, and the
second plan fell through because no one
would buy the fleet or any part of it.
So it would seem that while lying at
anchor and warping apart to the sink-
ing point for want of proper care and
operation, its equipment, whether on
board or in some storage warehouse, is
being disposed of whenever or wherever
a market for it is found.

The radio section of the Shipping
Board has to-day about 200 complete
combination transmitting and receiving
sets for sale. These sets are surplus,
but were originally installed on the
wooden fleet of the board and cost ap-
proximately \$5,000 each.

All sets, which are said to be in ex-
cellent shape and condition, include a
receiving set, a 1-kilowatt spark trans-

mitting set, with a 140 ampere hour
storage battery. They are located at
most of the principal ports, but the bulk
of the surplus equipment is in storage
at Norfolk, Va., where it may be in-
spected.

MANY STATES TO FOLLOW MICH- IGAN IN RADIO.

Michigan officially is to install a radio
system that is the first of its kind in
America, using thirteen of the Shipping
Board radio sets as its operating equip-
ment. Several other States have made
inquiry at the Radio Section of the De-
partment of Commerce concerning the
licensing of State radio systems.

The department is of the opinion that
point to point radio stations should be
discouraged except in States where radio
is practically the only means of ef-
fecting dependable communication or
the destruction of existing systems is
threatened.

S. U. MARINE BAND AT N O F EVERY WEDNESDAY.

The United States Marine Band under
the leadership of Capt. W. H. Santel-
mann, has given two concerts by radio
from N O F. Anacostia, on Wednes-
day evenings for the past fortnight.
Fans from all over the country are re-
porting on the reception of the pro-
gramme, some from as far away as
Central Canada and west of the Missis-
sippi Valley.

QUESTIONS AND ANSWERS

Charles Behn, Brooklyn—"What is
the wave length of a single wire aerial
135 feet long, with a 5-foot lead-in and
a 15-foot ground? Is there any danger
from lightning if the aerial is installed
according to regulation? What is the
hook-up of a loading coil with a regular
crystal set?" Answer—Wave length of
aerial is about 325 metres. No. Read
articles on lightning protection published
in The Evening World Radio Column on
June 2 and 3. The loading coil should
be connected in series with your an-
tennae.

John Clair—Send a diagram of
your hook-up and be more explicit as to
details of installation.

E. D. Walker—"What is the maxi-
mum receiving radius of the following
set? An aerial 100 feet long, vario
coupler, crystal (galena) detector,
43 plate variable condenser, a phone
condenser and a pair of 2,000 O.H.M.
phones." Answer—It is impossible for us
to tell just what any set will do. At-
mospheric conditions and location have
too much to do with reception for
any one to say without testing just
what any set will do under existing
conditions at any distance.

Reader—"What is the effect of plac-
ing condensers in series and placing
them in parallel?" Answer—When con-
densers are placed in series their total
capacity will be equal to the reciprocal

of the sum of the reciprocals of the ca-
pacities, which is always smaller than
the smallest condenser in the series.
The effect of connecting condensers in
series is to increase the thickness of the
dielectric which reduces the capacity.
If a series of condensers of like capacity
are hooked up the total capacity will be
equal to the capacity of one condenser
in the series divided by the number in
series. In parallel the result is the sum
of the individual capacities in the hook-
up.

E. T. Newark—"Will a crystal set in
lead work as well as one that is just
held in the claws of a holder?" Answer—
A crystal set in lead will not
work at all. The heat of the melting
lead proves ruinous to the sensitivity of
any crystal. The metallic substance
which you see crystals set in is not lead,
but a sort of metal made by mixing tin,
oil and mercury into a paste.

K D K A—Pittsburgh 340 Metres.

2.30 P. M. and at 15-minute intervals
thereafter—Baseball scores. 7 P. M.—
Baseball scores, news, week-
ly survey of business conditions by the
National Industrial Conference Board.

7.45 P. M.—Government market re-
ports and a report of the New York
Stock Exchange. 9 P. M.—Baseball scores. 9.30 P. M.—
Interior Decoration, by the Joseph Horne Com-
pany, Pittsburgh.

8.30 P. M.—"Arachnis" and "The
Story of Clytie," bedtime stories for the
children.

9 P. M.—Music. 10 P. M.—Baseball scores.
10.55 P. M.—Arlington time signals.

W J Z—Newark 360 Metres.

Features for the day:
Agricultural reports at 12 M. and 1
P. M. Arlington official time at 12.55 to 1
P. M. and 10.55 to 11 P. M. Baseball scores from 2 P. M. to 5
P. M. Music every hour from 11 A. M. to 5
P. M. Shipping news at 2.05 P. M. and 6
P. M. Weather reports at 12 M., 1 P. M., 6
P. M. and 11.01 P. M.

4 P. M.—"Business and Industrial
Conditions in the United States," by
the National Industrial Conference
Board. 7 P. M.—Stories from St. Nicholas
Magazine. 7.30 P. M.—"Development of Lawn
Tennis and the Davis Cup Contest," by
Julian S. Myrick, President of the
United States Lawn Tennis Association.

8 to 9.30 P. M.—Concert under the
direction of Charles D. Isaacson, Mu-
sical Director of the New York Even-
ing Mail. Opera Recital—1. "Face to
Face with Rossini." 2. The Story of the

Opera—told in running fashion through-
out the performance by Charles D.
Isaacson, Chairman. "The Barber of
Seville," by Giocchino Rossini, comic
opera in two parts, cast: Rosina, Eva
Leon, soprano; Bertha, Edith Mackie,
soprano; Count Almaviva, Alexander
Tronoff, tenor; Figaro, Alberto Ter-
radi, baritone; Doctor Bartolo, Don
Basilio; Natasia, Cervi, basso. Remo
Taverna, conductor (at the piano).
9.30 P. M.—Joint recital by Florence
Briggs, cellist; Dorothy Fine, pianist
Briggs, cellist; Dorothy Fine, pianist and
accompanist. Programme: "Melodie,
Massenet; "Serenade," P. M.; "Simple
Ave," Thome; "Gypsy Love Song,"
Victor Herbert; "The Swan," Saint-
Saens; "Romance," Rubinstein; "Ho-
mance Sans Parole," Van Goens;
"Where My Caravan Has Rested,"
Lohr; "Believe Me, if All Those En-
dearing Young Charms," by Miss
Briggs; "Romance," Sibelius; Miss Fine,
"Country Gardens," Grainger; Miss
Fine.

CLOUDS OF MOSQUITOES CAUSE FIRE ALARMS

Mistaken for smoke issuing from
Two Chicago Church Steeple.
CHICAGO, June 5.—Mosquitoes
flying in such thick swarms that they
were mistaken for smoke caused
two fire alarms yesterday.

Members of a truck company an-
swered a call saying that the steeple
of the St. Michael Roman Catholic
Church was burning. The firemen
saw what they at first supposed was
a small cloud of smoke and then
raised their extension ladder. When
pipemen mounted the ladder they en-
countered the mosquitoes and were
forced back. They found no fire.

The same experience was met by
members of an engine company
called to the Zion Baptist Church in
another part of the city.

SHIP NEWS INFORMATION

Arrived Yesterday.

Hansa, Hamburg May 25
Laconia, Liverpool May 24
Tolosa, Port Linton May 28
Kronland, Antwerp May 20

Due To-Day.

Baltic, Liverpool May 27
La Savoie, Havre May 27
Euro, Hamburg May 27
Maracibo, Maracaibo May 26
Oropesa, Southampton May 26
Monterey, Havana June 1
Porto Rico, San Juan May 21
Columbia, Cristobal May 20

Due To-Morrow.

Matura, Trinidad May 30
Orizaba, Havana June 3

Due Wednesday.

Giuseppe Verdi, Naples May 23
Honorio, Southampton May 21
Bonnie, Antwerp May 21
P. Hamilton, Bermuda June 2
Vandeyck, Buenos Ayres May 18

Sail To-Day.

Colon, Cristobal 11.30 A. M. 5.00 P. M.
Sail To-Morrow.

Maracibo, Trinidad 8.00 A. M. Noon
Clan McKay, Monte-
video 8.00 A. M. Noon
Castigny, Antwerp 8.00 A. M. 9.00 A. M.

Sail Wednesday.

Mails Close. Sails. Noon
Pres. Monroe, London. 8.30 A. M. 10.00 A. M.
Hannover, Bremen 7.00 A. M. 10.00 A. M.
St. Paul, Hamburg 8.00 A. M. Noon
Belvidere, Trieste 8.00 A. M. Noon
Columbia, San Fran-
cisco 7.30 A. M. 10.00 A. M.

BAD COMPANY.

(From the Savannah News.)
Johnny had used some unparlame-
ntary language, much to his mother's
distress.

"Johnny," she cried, "do stop using
such dreadful expressions. I can't
imagine where you pick them up."

"Well, mother, Shakespeare uses
them."

"Then don't play with him again,"
commanded his mother; "he's not a fit
companion for you, I'm sure."

Why We Need A Tariff

A tariff on foreign pro-
ducts imported into this
country is primarily a
wall erected around the
country for the protection
of its workmen and its
industries.

By protecting the coun-
try's industries the tariff
protects the American
workman and enables him
to maintain a decent
standard of living. This
is an objective with which
no self-respecting citizen
can quarrel.

The tariff protects the
citizens at large by shut-
ting out of the country
cheap foreign-made goods
which, generally speak-
ing, are in no way com-

parable in quality and
workmanship with the
honest American product.

To illustrate by an ex-
ample with which we are
familiar: the only shoes
imported into this country
which can in any way be
compared with Coward
Shoes are sold at a great
advance in price over
Coward Shoe prices.

These two elements—
protection of American
industries and protection
of American workmen—
are the main supports of
the tariff, and, when
understood, they are
sufficient in themselves to
put every citizen solidly
back of the tariff.

James S. Boward

"—I hated to walk around"

March 20, 1922

The O'Sullivan Heel Company
151 Hudson Street, New York, N.Y.

Gentlemen:

While my regular shoes were being repaired
recently, I had to wear an old pair with leather
heels.

By evening of the second day the bones of
my feet, especially on the outside, were painfully
sore. They felt as though they had been pounded
until they ached. I hated to walk around.

The following day I got my first pair back
with their new O'Sullivan's. I ceased to feel
the pavements with every step, and within three
days, the last trace of soreness had disappeared.

I was so delighted to get back to O'Sullivan's
that I'm writing to tell you what O'Sullivan's
mean to me.

Very sincerely yours,

Gentleman

THIS letter, written by a promi-
nent New York artist, speaks for
itself.

The price of O'Sullivan's Safety Cushion
Heels to you is generally the same as the
price of other heels, in spite of the fact
that O'Sullivan's cost the dealer more.

INSIST ON GETTING O'SULLIVAN'S

Your repairman could make a bigger im-
mediate profit on any one of half a dozen
substitutes—but when he puts on O'Sulli-
van's he knows you'll bring trade to him
again.

Ask for O'Sullivan's when you leave your
shoes—see that they are attached. The
O'Sullivan Heel Company.

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ADDRESS
NEW YORK WORLD,
NEW YORK CITY



"Oh Boy!"
says
Frankie Frush

Those Chiclets
are great,
take it from
the "Fordham Flash"!

Free sample box
when you meet
the Girl in the
Orange Tam!

Try 'em—
peppy and
delicious!

Chiclets
the delicious
candy coated
chewing gum

Peppermint
Tutti-frutti
Spearmint
10 for 5c

American Chic Co.